

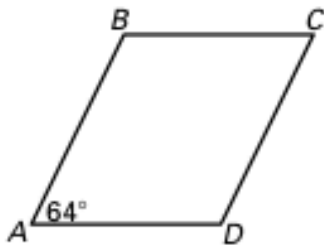
Honors Geometry

Worksheet 8.2

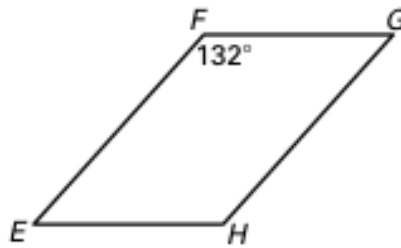
Name _____

Find the measure of the indicated angle in the parallelogram.

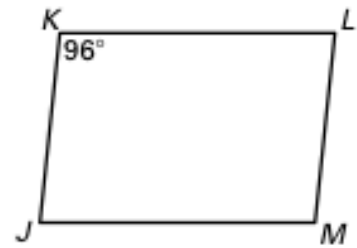
1. Find $m\angle B$.



2. Find $m\angle G$.

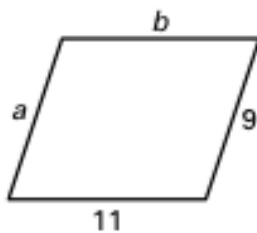


3. Find $m\angle M$.

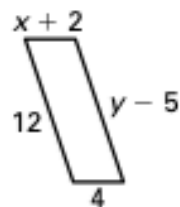


Find the value of each variable in the parallelogram.

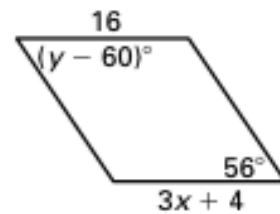
4.



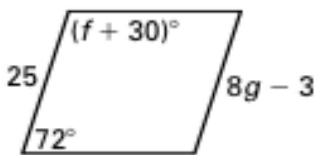
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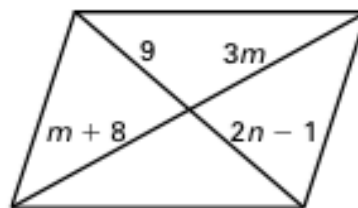
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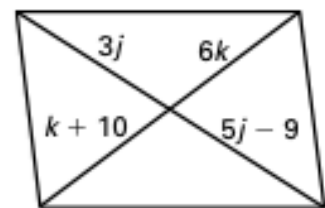
7.



8.



9.

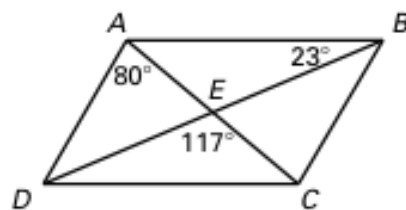


10. In $\square WXYZ$, $m\angle W$ is 50 degrees more than $m\angle X$. Sketch $\square WXYZ$. Find the measure of each interior angle. Then label each angle with its measure.

11. In $\square EFGH$, $m\angle G$ is 25 degrees less than $m\angle H$. Sketch $\square EFGH$. Find the measure of each interior angle. Then label each angle with its measure.

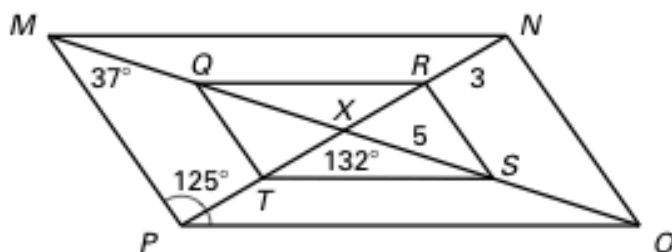
Find the indicated measure in $\square ABCD$.

- | | |
|-------------------|-------------------|
| 12. $m\angle AEB$ | 13. $m\angle BAE$ |
| 14. $m\angle AED$ | 15. $m\angle ECB$ |
| 16. $m\angle BAD$ | 17. $m\angle DCE$ |
| 18. $m\angle ADC$ | 19. $m\angle DCB$ |

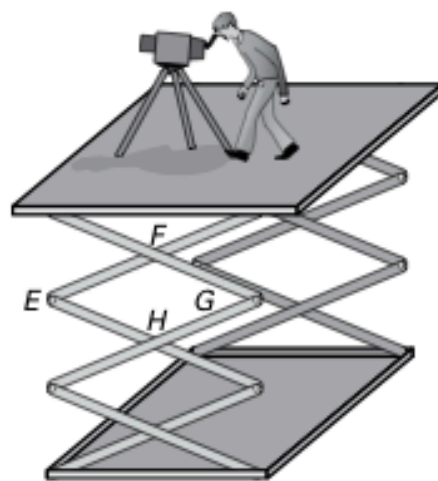


Use the diagram of $\square MNOP$. Points Q , R , S , and T are midpoints of \overline{MX} , \overline{NX} , \overline{OX} , and \overline{PX} . Find the indicated measure.

20. PN
21. MQ
22. XO
23. $m\angle NMQ$
24. $m\angle NXO$
25. $m\angle MNP$
26. $m\angle NPO$
27. $m\angle NOP$



28. **Movie Equipment** The scissor lift shown at the right is sometimes used by camera crews to film movie scenes. The lift can be raised or lowered so that the camera can get a variety of views of one scene. In the figure, points E , F , G , and H are the vertices of a parallelogram.



- a. If $m\angle E = 45^\circ$, find $m\angle F$.
 - b. What happens to $\angle E$ and $\angle F$ when the lift is raised? *Explain.*
29. In parallelogram $RSTU$, the ratio of RS to ST is $5 : 3$. Find RS if the perimeter of $\square RSTU$ is 64.